APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/330,769	06/11/1999	WAYNE E. BRETL	7081	9810

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EXAMINER
RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
2613	14

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *15 September 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-88* is/are pending in the application.

   4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,11,16,17,29,32,37,42,46,47,56,57,59-62,64,70,74,75 and 81-88* is/are rejected.

7)☐ Claim(s) *18,19,30,31,39,48,58,66 and 76* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 2-10,12-15,20-27,33-36,38,40,41,43-45,47,49-55,63-69,71-73 and 77-80.

DETAILED ACTION

Response to Amendment

1.   Applicant's arguments with respect to claims 1, 11, 16-17, 28-29, 32, 37, 42, 46-47, and

56-57 59-62, 64, 70, 74-75, 81-88 as filed in Paper 13 on 9/15/03 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined

was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment

by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.   Claims 1, 11, 16-17, 28-29, 32, 37, 42, 46-47, 56-57, and 88 are rejected under 35

U.S.C. 102(e) as being anticipated by Adolph et al., (hereinafter referred to as "Adolph").

Adolph discloses an MPEG on screen display coder (Adolph: figure 6) comprising: an on

screen display turn on device arranged to provide an output when an on screen display is to be

turned on (Adolph: column 3, lines 40-45); and an MPEG encoder arranged to receive dynamic

video frames and process the dynamic video frames to encode frames with the on screen display

device in response to the output of the on screen display turn on device (Adolph: column 3, lines

55-65), as in claim 1.

Regarding claim 11, Adolph discloses that the on screen display is overlaid on video

(Adolph: column 4, lines 1-14), as specified.

Regarding claim 16, Adolph discloses that the MPEG encoder is arranged to encode I

frames (Adolph: 1, lines 45-55), as specified.

Regarding claim 17, Adolph discloses that the MPEG encoder is arranged to encode

subsequent P frames based on the encoded I frames (Adolph: column 1, lines 35-40), as in the

claim.

Regarding claim 28, Adolph discloses that the MPEG encoder is arranged to encode I

frames (Adolph: column 1, lines 35-40) with the on screen display (Adolph: column 4, lines 1-

14), as specified.

Regarding claim 29, Adolph discloses that the MPEG encoder is arranged to encode

subsequent P frames based on the encoded I frames (Adolph: column 1, lines 35-40), as in the

claim.

Adolph discloses an MPEG on screen display coder (Adolph: column 2, lines 1-15; figure

6), comprising: MPEG encoder arranged to encode frames with the on screen display device in

response to the output of the on screen display turn on device (Adolph: column 3, lines 40-45);

and a multiplexer arranged to replace the original frames with the encoded frames for supply to a

digital television receiver (Adolph: column 4, lines 5-32), as in claim 32.

Regarding claim 37, Adolph discloses that the encoded frames have a time base which is slaved to the original frames (Adolph: column 3, lines 15-20), as in the claim.

Regarding claim 42, Adolph discloses that the on screen display is overlaid on video (Adolph: column 6, lines 20-25), as specified.

Regarding claim 46, Adolph discloses that the MPEG encoder is arranged to encode I frames (Adolph: column 1, lines 50-55), as specified.

Regarding claim 47, Adolph discloses that the MPEG encoder is arranged to encode subsequent P frames based on the encoded I frames (Adolph: column 1, lines 35-40), as in the claim.

Regarding claim 56, Adolph discloses that the MPEG encoder is arranged to encode I frames (Adolph: column 1, lines 50-55) with the on screen display (Adolph: column 4, lines 1-14), as specified.

Regarding claim 57, Adolph discloses that the MPEG encoder is arranged to encode subsequent P frames based on the encoded I frames (Adolph: column 1, lines 35-50), as in the claim.

Adolph discloses an MPEG on screen display coder (Adolph: column 2, lines 1-15; figure 6), comprising: a demultiplexer arranged to demultiplex frames of a selected video program from frames of a non-selected program in a transport stream (Adolph: column 3, lines 14-20); an MPEG encoder arranged to receive the frames of the selected program and to process the frames of the selected program so as to encode frames with an on screen display (Adolph: column 3, lines 40-45); and a multiplexer arranged to multiplex the encoded frames with the frames of the

non-selected video program in the transport stream (Adolph: column 4, lines 5-32), as in claim

88.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in ·
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 59-62, 64, 70, 74-75, 81-87 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Adolph et al., (hereinafter referred to as "Adolph") in view of Naimpally et al.,

(hereinafter referred to as "Naimpally").

Adolph discloses an MPEG on screen display coder (Adolph: column 2, lines 1-15; figure

6), comprising: MPEG encoder arranged to encode frames with the on screen display device in

response to the output of the on screen display turn on device (Adolph: column 3, lines 40-45);

and a multiplexer arranged to replace the original frames with the encoded frames for supply to a

digital television receiver (Adolph: column 4, lines 5-32), as in claim 59. However, Adolph fails

to disclose that the multiplexer is arranged to add make-up packets such that each encoded frame

has as many transport packets as the original frames, as in the claim. Naimpally discloses

transport stream processing method including the addition of make-up packets (Naimpally:

column 4, lines 35-40) for transmission of transport packets (Naimpally: column 4, lines 15-27)

of video data (Naimpally: column 4, lines 41-47) that has been encoded according to MPEG

(Naimpally: column 1, lines 45-68; column 2, lines 1-19) in order to efficiently process encoded

video data at a desired transmission rate (Naimpally: column 2, lines 24-65). Accordingly, it

would have been obvious for one of ordinary skill in the art to incorporate the Naimpally

addition of make-up packets into the transport stream into Adolph on screen display coder in

order efficiently process encoded video data at a desired transmission rate. The Adolph on screen

display coder, now incorporating Naimpally's addition of make-up packets, has all of the

features of claim 59.

Regarding claim 60, the Adolph on screen display coder, now incorporating Naimpally's

addition of make-up packets, further discloses that the packets are null packets (Naimpally:

column 5, lines 1-5), as in the claim.

Regarding claim 61, the Adolph on screen display coder, now incorporating Naimpally's

addition of make-up packets, has that the make up packets are program map table packets

(Naimpally: column 8, lines 55-65), as in the claim.

Adolph discloses an MPEG on screen display coder (Adolph: column 2, lines 1-15;

column 4, lines 1-14), comprising: a buffer arranged to receive and buffer an MPEG transport

data stream containing frames of a selected and frames of a non-selected program (Adolph:

column 3, lines 14-16); MPEG encoder arranged to encode frames with the on screen display

device in response to the output of the on screen display turn on device (Adolph: column 3, lines

33-45); and a multiplexer arranged to replace the original frames with the encoded frames for

supply to a digital television receiver (Adolph: column 3, lines 65-67; column 4, lines 1-5), as in

claims 62 and 81. However, Adolph fails to disclose that the multiplexer is arranged to add

make-up packets such that each encoded frame has as many transport packets as the original

frames, as in the claim. Naimpally discloses transport stream processing method including the

addition of make-up packets (Naimpally: column 4, lines 35-40) for transmission of transport

packets (Naimpally: column 4, lines 15-27) of video data (Naimpally: column 4, lines 41-47) that

has been encoded according to MPEG (Naimpally: column 1, lines 45-68; column 2, lines 1-19)

in order to efficiently process encoded video data at a desired transmission rate (Naimpally:

column 2, lines 24-65). Accordingly, it would have been obvious for one of ordinary skill in the

art to incorporate the Naimpally addition of make-up packets into the transport stream into

Adolph on screen display coder in order efficiently process encoded video data at a desired

transmission rate. The Adolph on screen display coder, now incorporating Naimpally's addition

of make-up packets, has all of the features of claims 62 and 81.

Regarding claim 64, the Adolph on screen display coder, now incorporating Naimpally's

addition of make-up packets, has that the encoded frames have a time base which is slaved to the

original frames (Adolph: column 3, lines 15-20), as in the claim.

Regarding claim 70, the Adolph on screen display coder, now incorporating Naimpally's

addition of make-up packets, has that the on screen display is overlaid on video (Adolph: column

4, lines 1-14), as specified.

Regarding claim 74, the Adolph on screen display coder, now incorporating Naimpally's

addition of make-up packets, has that the MPEG encoder is arranged to encode I frames

(Adolph: column 1, lines 50-55), as specified.

Regarding claim 75, Adolph on screen display coder, now incorporating Naimpally's

addition of make-up packets, has that the MPEG encoder is arranged to encode subsequent P

frames (Adolph: column 1, lines 35-40) based on the encoded I frames (Adolph: column 5, lines

5-15), as in the claim.

Regarding claim 82, the Adolph on screen display coder, now incorporating Naimpally's addition of make-up packets, further discloses that the packets are null packets (Naimpally: column 5, lines 1-5), as in the claim.

Regarding claim 83, the Adolph on screen display coder, now incorporating Naimpally's addition of make-up packets, has that the make up packets are program map table packets (Naimpally: column 8, lines 55-65), as in the claim.

Regarding claim 84, the Adolph on screen display coder, now incorporating Naimpally's addition of make-up packets, has a delay buffer arranged to delay the MPEG transport stream by an amount of time commensurate with an amount of time required by the MPEG encoder to encode the framers of the selected program with the on screen display (Adolph: column 3, lines 15-20; column 4, lines 25-35), as in the claim.

Adolph discloses an MPEG on screen display coder (Adolph: column 2, lines 1-15; column 4, lines 1-14), comprising: MPEG encoder arranged to encode frames with the on screen display device in response to the output of the on screen display turn on device (Adolph: column 3, lines 33-45); and a multiplexer arranged to replace the original frames with the encoded frames for supply to a digital television receiver (Adolph: column 3, lines 65-67; column 4, lines 1-5), as in claim 85. However, Adolph fails to disclose that the multiplexer is arranged to add make-up packets such that each encoded frame has as many transport packets as the original frames, as in the claim. Naimpally discloses transport stream processing method including the addition of make-up packets (Naimpally: column 4, lines 35-40) for transmission of transport packets (Naimpally: column 4, lines 15-27) of video data (Naimpally: column 4, lines 41-47) that has been encoded according to MPEG (Naimpally: column 1, lines 45-68; column 2, lines 1-19)

in order to efficiently process encoded video data at a desired transmission rate (Naimpally: column 2, lines 24-65). Accordingly, it would have been obvious for one of ordinary skill in the art to incorporate the Naimpally addition of make-up packets into the transport stream into Adolph on screen display coder in order efficiently process encoded video data at a desired transmission rate. The Adolph on screen display coder, now incorporating Naimpally's addition of make-up packets, has all of the features of claim 85.

Regarding claim 86, the Adolph on screen display coder, now incorporating Naimpally's addition of make-up packets, further discloses that the packets are null packets (Naimpally: column 5, lines 1-5), as in the claim.

Regarding claim 87, the Adolph on screen display coder, now incorporating Naimpally's addition of make-up packets, has that the make up packets are program map table packets (Naimpally: column 8, lines 55-65), as in the claim.

Allowable Subject Matter

6.   Claims 18-19, 30-31, 39, 48, 58, 66, and 76 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

These dependent claims all recite the step for "…supplying first and second I frame markers…" which are not anticipated nor obvious over the art of record. Accordingly, these claims are amended as indicated above, and rejected claims 1, 11, 16-17, 28-29, 32, 37, 42, 46-47, 56-57 59-62, 64, 70, 74-75, and 81-83 are canceled, the application would be placed in a condition for allowance.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The

examiner can normally be reached on Monday-Friday 8 hours.

       If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone numbers for the

organization where this application or proceeding is assigned are (703)-308-6606 for regular

communications and (703)-308-6606 for After Final communications.

       Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)-305-4700.

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Andy S. Rao
Primary Examiner
Art Unit 2613

ANDY RAO
PRIMARY EXAMINER

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asr
November 4, 2004